

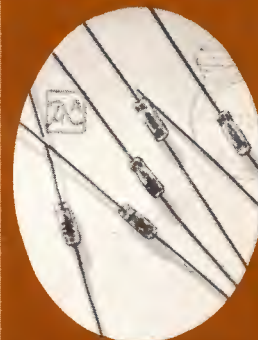


Engineering
Standards
Data

MICROWAVE ASSOCIATES, INC. SEMICONDUCTOR DIVISION

BURLINGTON, MASSACHUSETTS
Western Union FAX • TWX: Burlington, Mass. 342 • BRowning 2-3000

DIFFUSED
SILICON MESA
COMPUTER
DIODES

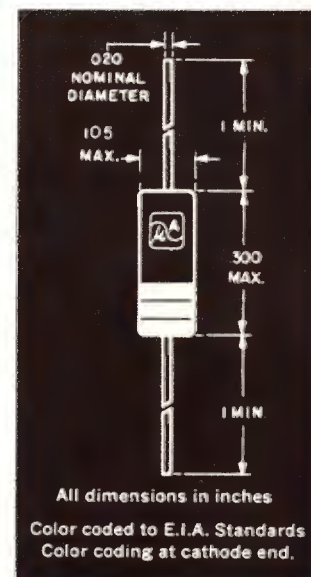


SUBMINIATURE FAST SWITCHING HIGH CONDUCTANCE SILICON DIODE

I N920

These diodes are designed for use in high-current pulse circuits including memory core drivers, clampers, gates and logic circuits. Low values of forward voltage drop, junction capacitance, and reverse current allows greater flexibility in circuit design, especially where large numbers of diodes are required.

<u>MAXIMUM RATINGS @ 25°C</u>	<u>SYMBOL</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
Average Forward Current @ 25°C			250	mAdc
Peak Surge Current	i surge		750	mAdc
Reverse Voltage Steady-State DC	V _R		36	Vdc
Power Dissipation	P		400	mW
Operating & Storage Temperature Range	T	-65	+175	°C
Derating above 25°C (free air)			2.7	mW/°C



ELECTRICAL SPECIFICATIONS @ 25°C

<u>TEST</u>	<u>TEST CONDITIONS</u>	<u>SYMBOL</u>	<u>MIN</u>	<u>MAX</u>	<u>UNITS</u>
Forward Voltage Drop	I _F = 500 mA	V _F	0.7	1.00	Vdc
Reverse Current	V _R = -30 V T = 150°C	I _R I _R		.25 50	μAdc μAdc
Capacitance*	V _R = -9 V	C ₋₉		7.5	pf
Recovery Time	I _F = 500 mA switched to V _R = -30 V through 1000 ohm loop to 3 ma.	t _{rr}		.3	μsec.

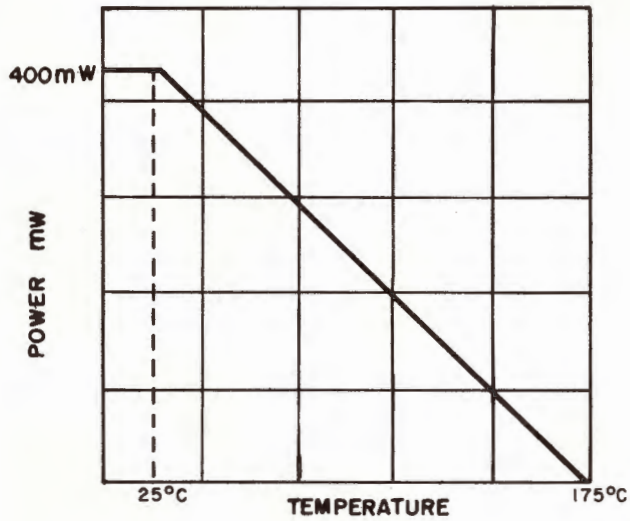
* Average case capacitance is 0.30 pf.

These specifications are in accordance with MIL-S-19500B.

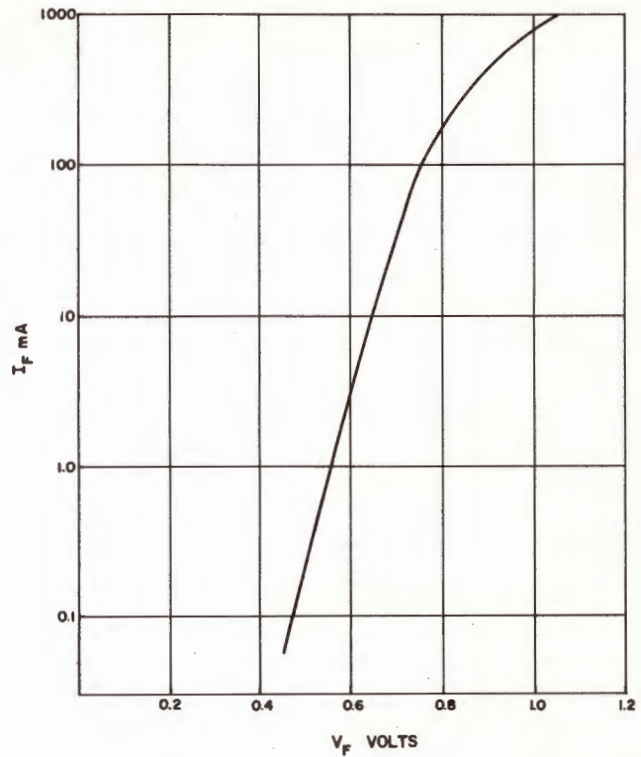
All specifications listed herein are subject to modification.

TYPICAL ELECTRICAL CHARACTERISTICS

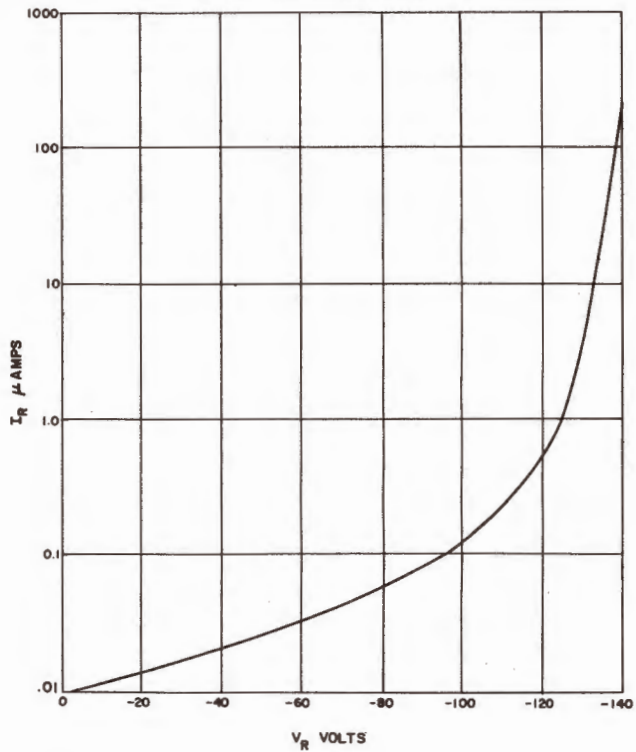
POWER DERATING



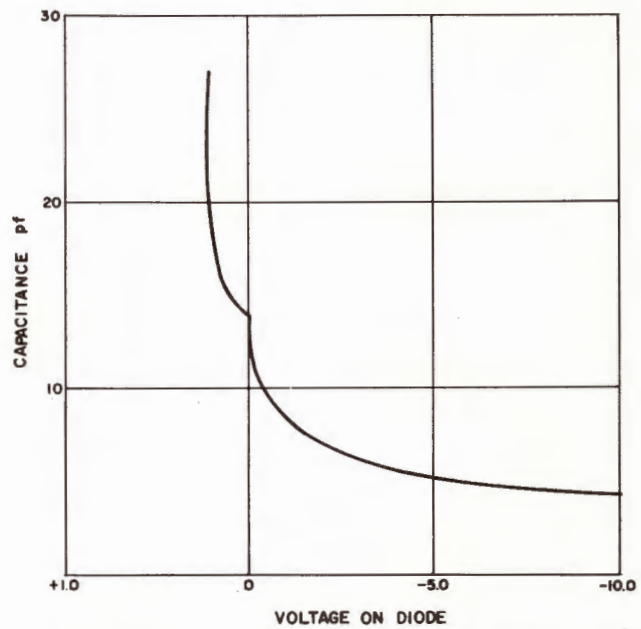
FORWARD CHARACTERISTIC AT 25°C



REVERSE CHARACTERISTIC AT 25°C



DIODE CAPACITANCE VS. VOLTAGE



NOTE CHANGE IN VOLTAGE SCALE. CAPACITANCE IS CONTINUOUS THROUGH ZERO VOLTAGE.